

WHAT IS CLAIMED IS:

- 1                    1.     A transmitter circuit comprising:  
2                    an oscillator circuit including a surface acoustic wave (SAW)  
3 resonator, the oscillator circuit generating a carrier signal; and  
4                    an amplifier circuit receiving the carrier signal and receiving a data  
5 signal, the amplifier circuit generating an output signal as the carrier signal  
6 modulated with the data signal.
  
- 1                    2.     The transmitter circuit of claim 1 further comprising:  
2                    an antenna coupled to the amplifier circuit to transmit the output  
3 signal.
  
- 1                    3.     The transmitter circuit of claim 1 further comprising:  
2                    control logic configured to generate the data signal.
  
- 1                    4.     The transmitter circuit of claim 3 wherein the control logic  
2 comprises:  
3                    a microprocessor.
  
- 1                    5.     The transmitter circuit of claim 3 further comprising:  
2                    an assertable switch connected to the control logic, wherein the  
3 control logic is configured such that assertion of the switch causes the control logic  
4 to generate the data signal.
  
- 1                    6.     The transmitter circuit of claim 1 wherein the oscillator circuit  
2 further comprises:  
3                    a bipolar junction transistor.
  
- 1                    7.     The transmitter circuit of claim 1 wherein the amplifier circuit  
2 further comprises;  
3                    a bipolar junction transistor.

1                   8. The transmitter circuit of claim 1 wherein the carrier signal has  
2 a frequency of at least 300 MHz.

1                   9. An article of manufacture comprising:  
2 a housing;  
3 at least one circuit board;  
4 an oscillator circuit on the at least one circuit board, the oscillator  
5 circuit including a surface acoustic wave (SAW) resonator, the oscillator circuit  
6 generating a carrier signal; and  
7 an amplifier circuit on the at least one circuit board, the amplifier  
8 circuit receiving the carrier signal and receiving a data signal, the amplifier circuit  
9 generating an output signal as the carrier signal modulated with the data signal.

1                   10. The article of claim 9 further comprising:  
2 an antenna coupled to the amplifier circuit to transmit the output  
3 signal.

1                   11. The article of claim 9 further comprising:  
2 control logic configured to generate the data signal.

1                   12. The article of claim 11 wherein the control logic comprises:  
2 a microprocessor.

1                   13. The article of claim 11 further comprising:  
2 an assertable switch connected to the control logic, wherein the  
3 control logic is configured such that assertion of the switch causes the control logic  
4 to generate the data signal.

1                   14. The article of claim 9 wherein the oscillator circuit further  
2 comprises:  
3 a bipolar junction transistor.

1                   15.    The article of claim 9 wherein the amplifier circuit further  
2 comprises;  
3                   a bipolar junction transistor.

1                   16.    The article of claim 9 wherein the carrier signal has a  
2 frequency of at least 300 MHz.

1                   17.    A method of transmitting comprising:  
2                   generating a carrier signal with an oscillator circuit including a  
3 surface acoustic wave (SAW) resonator;  
4                   generating a data signal;  
5                   generating an output signal with an amplifier circuit receiving the  
6 carrier signal and receiving the data signal, the amplifier circuit generating an output  
7 signal as the carrier signal modulated with the data signal; and  
8                   transmitting the output signal.